# DOCKET FILE COPY ORIGINAL

RECEIVED

FCC - MAIL ROOM

Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W. - Room 222 Washington, D.C. 20554

March 14, 1994

Re: Comments of the Part 15 Coalition in PR Docket 93-61, Public Notice DA-129.

Transmitted herewith are an original and nine copies of the comments of the Part 15 Coalition in the above referenced proceeding.

if you have any questions with regard to this matter, please do not hesitate to contact me. I can be reached at 408/735-6690.

Sincerely,

Steve Schear

Chairman, Part 15 Coalition

No. of Copies rec'd D49
List ABCDE

RECEIVED

FCC - MAIL ROOM

#### **CERTIFICATE OF SERVICE**

I, <u>Karen M. Briggs</u>, hereby certify that a copy of the foregoing Comments of the Part 15 Coalition was mailed first-class United States mail, postage prepaid, this 14th day of March 1994 to the parties listed on the attached service list.

Lever Dhrujz

RECEIVED

#### Before the

# FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

FCC - MAIL ROOM

In the Matter of	)
	)
Amendment of Part 90 of the	) PR Docket NO. 93-61 /
Commission's Rules to Adopt	) RM-8013
Regulations for Automatic	)
Vehicle Monitoring Systems	)

To: The Commission

## **COMMENTS OF THE PART 15 COALITION**

The Part 15 Coalition<sup>1</sup> ("The Coalition") hereby submits its comments on the PacTel Teletrac ("Teletrac") proposal<sup>2</sup> ("the proposal"), in the above captioned proceeding, which the FCC placed on Public Notice February 9, 1994.

In essence, the proposal changes the amount of spectrum required for the Teletrac proposed wideband multilateration system from 8 MHz to 5 MHz and the total allocation for the proposed Location and Monitoring Service (LMS) from 16 MHz to 10 MHz. Further the proposal requests that the Commission use the Rand McNally Basic Trading Areas (BTAs) as the service area for these services and that current licensees be automatically converted to BTAs.

<sup>1</sup> The Part 15 Coalition is comprised of 40 companies engaged in the research and development, marketing and manufacturing of wireless Part 15 devices (see appendix).

<sup>&</sup>lt;sup>2</sup> FCC Public Notice, DA 94-129, February 9, 1994

The Coalition opposes the placement of a new service in the same band currently occupied by narrowband automatic vehicle monitoring systems, amateur radio operations, unlicensed Part 15 devices, federal government users as well as Part 18 ISM equipment.

The fact that widespread interference will occur between Part 15 users and the new LMS is well documented on the record in addition to being documented in actual operation. The Commission cited, in the NPRM, an example of Teletrac contacting a Part 15 user in Chicago and informing the user to cease operation in this band because of harmful interference.<sup>3</sup>

This interference potential is a reality. It will not change merely because Teletrac says it can operate its wideband LMS in 5 rather than 8 MHz. In fact, the interference cited above was caused with a Teletrac system operating at less than 4 MHz.

### I. DISCUSSION

The record in this proceeding is overwhelmingly opposed to the establishment of a new LMS service in the 902-928 MHz band. Interference between the new service and Part 15 users has been well documented in the comment and reply rounds of this proceeding and need not be repeated here. One comment by the Telecommunications Industry Association (TIA), which was contained in their original comments as part of an excellent technical discussion of the interference potential, condenses the technical opposition quite well and summarizes the position of the Part 15 industry:

"...wide-band pulse ranging systems are inherently unsuited for operation in a band such as 902-928 MHz in which there are uncontrolled sources of interference that could be positioned almost arbitrarily close to the base sites."<sup>4</sup>

<sup>3</sup> Notice of Proposed Rulemaking, FCC 93-141, released April 9, 1994, at 5.

<sup>4</sup> TIA comments at 4.

The Part 15 devices entering the marketplace today will be mainly consumer owned and operated and will therefore defy locating the cause of the interference. These devices will be high-powered, randomly located and sold in large numbers. As a result, the interference to LMS systems will be predictable, destructive and anonymous.

# A. THE NEW LMS SERVICES SHOULD BE PLACED ELSEWHERE IN THE SPECTRUM

Since the original AVM interim rules were written twenty years ago, conditions have changed dramatically. Twenty years ago the Commission was foresighted in establishing interim rules to encourage AVM innovation in this band. Many narrowband AVM systems have flourished under those rules. But the situation has changed. The introduction of low cost Global Positioning Satellite (GPS) terminals has advanced the state-of-the-art in location monitoring. Today, location systems, based on GPS, are flourishing. These systems tie into available networks (e.g., cellular, SMR/ESMR) and thus obviate the need for additional spectrum.

Notwithstanding the benefits of LMS, allocating 10 MHz spectrum for a service which is already being provided in other spectrum appears to be a needless waste of spectrum. To allocate that spectrum in a way which disrupts a large domestic wireless industry is unreasonable and unwarranted.

The Commission, nearly 10 years ago, encouraged Part 15 devices to use this band and as a result, the Part 15 industry (including users) has grown to well over a billion dollars and its manufacturers populated by predominately small U.S. technology firms serving both large and small companies in every industry catagory nationwide. In fact, the domestic spread spectrum technology base was developed as a result of the Commission's action to open the 902-928 MHz band for such systems. Today the U.S. leads the world in spread spectrum technology, which incidentally is the predominate technology in use in devices operated in the 902-928 band.

If the Commission proceeds with the licensing of LMS systems in

this band, there will be a major dislocation of Part 15 equipment, loss of R&D investment and markets (with an accompanying loss of jobs) and a major increase in destructive interference between and among the various systems.

However, the Commission could avoid the disruption and interference by allocating spectrum to this new service elsewhere. For example, the NTIA (National Telecommunications and Information Administration) identified for possible transfer, to the FCC, 50 MHz of spectrum on February 10, 1994.<sup>5</sup>

Specifically, the 2390-2400 MHz band was included in the 50 MHz transfer. It yields exactly 10 MHz which would accommodate the new Teletrac proposal. This spectrum is vacant and its use would avoid all the problems associated with cramming the new LMS into the heavily used 902-928 MHz band.

# B. EXPANDING THE LICENSE AREA AND THE NATURE OF THE SERVICES TO BE OFFERED TO BTA SIZE WOULD AMOUNT TO A WINDFALL FOR THOSE LICENSEES WHO HAVE BEEN WAREHOUSING SPECTRUM FOR SEVERAL YEARS

The proposal to expand the license area to BTA size would be ill-advised. Teletrac currently holds licenses in the top 50 markets in the U.S. They have refused to build-out these licenses because of regulatory uncertainties. The few systems they have built are in their infancy and, as noted earlier, have already experienced interference from Part 15 devices.

Teletrac has been able to hold the majority of their licenses without building them out due to an unusually generous FCC waiver to the antiwarehousing rules which require construction within a defined number of months. This waiver is several years old and combined with the proposal to

<sup>5</sup> The recent budget reconciliation package contains language that directs the NTIA (part of the Department of Commerce) to transfer 200 MHz of spectrum to the FCC. The first 50 MHz was transferred on February 10th.

expand the license area would result in a windfall for Teletrac which has done little with these licenses.

The value of the Commission grant to Teletrac and an other licensee in this proceeding can be assessed by looking at the values that are being set for PCS spectrum. In the Commission's PCS proceeding, four of the spectrum blocks proposed to be auctioned are 10 MHz in size and BTA in scope. In their auction NPRM, the Commission cited the Congressional Budget Office's estimate of the value of PCS spectrum at 60 cents per pop per megahertz. This would value the 10 MHz requested for the LMS licensees at \$6 per pop.6

The top 50 BTAs have a population of over 147 million.<sup>7</sup> Accordingly, Commission acceptance of the Teletrac proposal would result in a windfall of over \$880 million for the two licensees in each BTA and an immediate windfall of nearly a half a billion dollars for Teletrac, a current licensee, and an equivalent shortfall to the U.S. Treasury from revenues it might realize if these applications were placed in PCS spectrum.

The counter argument that the PCS spectrum and the 902-928 MHz bands are not equal because of the other users of the band, ignores the fact that the PCS spectrum is already occupied by licensed private microwave users which will have to be relocated. At an average cost of \$200,000 per link, it has been estimated that it will cost well over one and a half billion dollars to completely clear the PCS band of incumbent microwave users. Moreover, several categories of current users (e.g., public service) are not being required to relocate.

Accordingly, Commission action to authorize a new Location and Monitoring Service in the 902-928 Mhz band and to grandfather licensees that hold (warehouse) unbuilt licenses represents a windfall opportunity for Teletrac to acquire extremely valuable spectrum at no cost.

<sup>6 &</sup>lt;u>Implementation of Section 309(j) of the Communications Act</u>
<u>Competitive Bidding</u>, FCC 93-455, released October 12, 1993 at para.103

<sup>7</sup> Rand McNally Commercial Atlas and Marketing Guide (1992).

## II. CONCLUSION

In summary, The alleged benefits from authorizing the new LMS service in the 902-928 band are not worth sacrificing the entire Part 15 industry. Commission action to license a new location service in the 902-928 MHz band would foreclose new research and development activity by the Part 15 industry in this band, cause widespread interference between the existing Part 15 devices and the new service and create a windfall for those companies that have been warehousing AVM spectrum for the last several years.

The Commission should solve these problems by simply allocating 10 MHz (2390-2400 MHz) of the spectrum recently provided from the government allocation to the new LMS.

Respectfully submitted,

Steve Schear Chairman

Part 15 Coalition 310 N. Mary Sunnyvale, CA 94086 408/735-6690

March 14, 1994